

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Stiegler et al. **GROUP:** 2424
SERIAL NO: 10/009,385 **EXAMINER:** Timothy R. Newlin
FILED: July 5, 2002
FOR: REPRODUCTION OF AUDIO AND VIDEO DATA
IN A LOCAL NETWORK

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

APPEAL BRIEF

This appeal is in response to the Official Action dated June 8, 2010, and the Notice of Appeal filed September 8, 2010. Please charge our deposit account no. 50-3381 in the amount of \$540.00 for the Appeal Brief fee.

I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being transmitted electronically to the Commissioner for Patents via EFS-web, on the date indicated below.



Kim M. Fiorentino
12/8/10
Date

TABLE OF CONTENTS

I.	Real Party in Interest.....	3
II.	Related Appeals and Interferences.....	3
III.	Status of Claims.....	3
IV.	Status of Amendments.....	3
V.	Summary of Claims Subject Matter.....	4
VI.	Grounds of Rejection to be Reviewed on Appeal.....	6
VII.	Argument.....	6
VIII.	Conclusion.....	12
	Claim Appendix.....	13
	Evidence Appendix.....	14
	Related Proceedings Appendix.....	15

I. REAL PARTY OF INTEREST

The real party in interest is Harman Becker Automotive Systems GmbH of Karlsbad, Germany.

II. RELATED APPEALS AND INTERFERENCES

The Appellant is not aware of any related appeals or interferences.

III. STATUS OF CLAIMS

On September 8, 2010, the Appellant appealed from the final rejection of claim 6 under 35 U.S.C. §103(a). Claims 1-5 and 7-17 are cancelled. Claim 6, which is set forth in the Claims Appendix attached hereto, is the sole remaining claim in this application.

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The invention relates generally to reproduction of audio and video data in a local network.

Independent claim 6 recites a local network having a ring network configuration with a plurality of subscribers each connected within the ring network by a data line to transmit and receive data therebetween. The various elements recited in claim 6 are discussed at least in the following locations¹ of the specification submitted on July 5, 2002:

FEATURES OF CLAIM 6	SPECIFICATION & DRAWINGS
A local network having a ring network configuration with a plurality of subscribers each connected within the ring network by a data line to transmit and receive data therebetween, the local network comprising:	<u>Figure:</u> 1 <u>Elements:</u> 1-5 <u>Specification:</u> Page 16, lines 4-7; page 17, lines 16-23; page 18, lines 1-9; page 19, lines 6-19; page 20, lines 6-8; page 21, lines 17-22; and page 23, lines 16-21
a first subscriber configured as a data source that transmits compressed audio and video data onto the ring network;	<u>Figure:</u> 1 <u>Elements:</u> 1 and 2 <u>Specification:</u> Page 19, lines 6 & 7; page 21, line 23; page 22, lines 1, 2, 22 & 23; and page 23, lines 1 and 2
a second subscriber that receives decompressed audio data via the ring network;	<u>Figure:</u> 1 <u>Elements:</u> 1, 3 and 4 <u>Specification:</u> Page 22, lines 13-21
a third subscriber that receives decompressed video data via the ring network,	<u>Figure:</u> 1 <u>Elements:</u> 1, 3 and 4 <u>Specification:</u> Page 22, lines 13-21
a fourth subscriber that includes	<u>Figure:</u> 1 <u>Elements:</u> 5
(i) a bit stream decoder that receives the compressed audio and video data via the ring network and decodes the compressed audio and video data and provides decompressed audio and video data;	<u>Figure:</u> 1 <u>Elements:</u> 1 and 6 <u>Specification:</u> Page 18, lines 9, 10, 21 & 22; page 19, lines 3-5 & 7-10; page 20, lines 19-23; page 21, lines 1-5; page 22, lines 4-6; and page 23, lines 2-15

¹ The following referenced line numbers include spaces between sections of the specification.

(ii) a separation stage that receives the decompressed audio and video data and separates the decompressed audio and video data to provide the decompressed audio data signal and the decompressed video data signal; and

Figure: 1

Elements: 7

Specification: Page 18, lines 10-13; page 19, lines 7-10; and page 22, lines 6-8

(iii) a control unit that controls the transmission of the decompressed audio data signal and the decompressed video data signal onto the ring network

Figure: 1

Elements: 1 and 8

Specification: Page 20, lines 9-20; and page 22, lines 9-12

where the second, third and fourth subscribers each comprise a data sink and the second, third and fourth subscribers are separate from each other and connected within the ring network by the data line.

Figure: 1

Elements: 1 and 3-5

Specification: Page 16, lines 4-10; page 19, lines 7-12; page 20, lines 6-8; page 21, lines 17-20; page 22, lines 2-4 & 6-8; and page 23, lines 16-21

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Whether claim 6 is obvious under 35 U.S.C. §103(a) in view of U.S. Patent No. 6,611,537 to Edens et al. (hereinafter “Edens”) and U.S. Patent No. 5,642,151 to Nusbickel et al. (hereinafter “Nusbickel”).

VII. ARGUMENT

Claim 6 recites a local network having a ring network configuration with a plurality of subscribers each connected within the ring network by a data line to transmit and receive data therebetween. The local network includes a fourth subscriber that includes:

“(i) a bit stream decoder that receives the compressed audio and video data via the ring network and decodes the compressed audio and video data and provides decompressed audio and video data;

(ii) a separation stage that receives the decompressed audio and video data and separates the decompressed audio and video data to provide the decompressed audio data signal and the decompressed video data signal; and

(iii) a control unit that controls the transmission of the decompressed audio data signal and the decompressed video data signal onto the ring network....” (Emphasis added).

The Official Action contends that the combination of Edens and Nusbickel teaches such a local network. In particular, while acknowledging that “Edens is silent on transmitting decompressed video data onto the ring network”, the Official Action contends that Nusbickel provides decompressed video signals onto a ring network. See page 5 of the Official Action. The Official Action further contends that it would have been obvious to one of ordinary skill in the art that Edens could have been modified to transmit decompressed signals onto the ring network using the teachings of Nusbickel. See pages 2 and 5 of the Official Action. The Official Action still further contends that Edens itself suggests such a modification by describing how audio data is

decompressed by an MPEG decoder and the decompressed audio is transmitted onto the ring network, for example to the loudspeakers. See pages 2 and 5 of the Official Action. Appellant respectfully disagrees, and submits that Edens is not being considered properly as a whole.

EDENS TEACHES AWAY FROM THE CLAIMED LOCAL NETWORK

The fourth subscriber in the claimed local network includes, as set forth above, a control unit that controls the transmission of the decompressed video data signal onto the ring network. See claim 6. Edens, in contrast, discloses a synchronous network that transmits compressed video onto a local ring network. See column 13, lines 59-65 of Edens. Notably, Edens teaches that this synchronous network advantageously permits the compressed digital information (e.g., the compressed video) to be distributed and processed throughout the logical ring network before being decompressed by a decoder at its ultimate destination. See column 10, lines 50-55 of Edens. In addition, the synchronous network accommodates new restructured digital-ready devices that can redistribute existing device functionality across the local ring network. See column 10, lines 45-50 of Edens. A MPEG2 decoder, for example, can be removed from a DVD player in order to be redistributed with, or incorporated into a television. See column 10, lines 45-55 and FIG. 1 of Edens. However, if the synchronous network in Edens was modified to transmit uncompressed video as suggested on page 5 of the Official Action the modified network would no longer be capable of providing the aforesaid advantages; i.e., distributing and processing the compressed video before it reaches its ultimate destination, or accommodating new restructured digital-ready devices.

If the synchronous network in Edens was modified to transmit uncompressed video, the synchronous network would also no longer function for its intended purpose. In particular,

Edens repeatedly and consistently teaches that the compressed video is to be decompressed after it has left the logical ring network. For example, FIG. 1 of Edens, which is reproduced below for convenience, clearly illustrates that each video display (TV) is configured with its own MPEG decoder; i.e., each TV individually decompresses video transmitted over the local ring network 120.

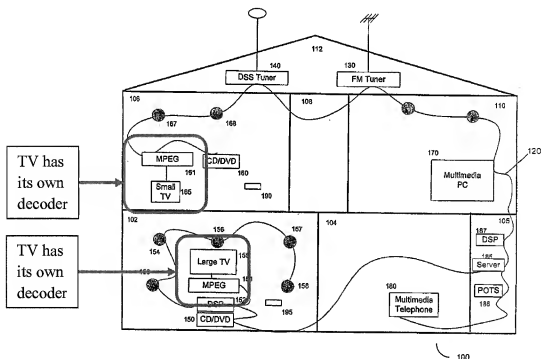


FIG. 1 of Edens, annotated.

Edens also expressly discloses the following regarding the decompression of video data:

- “...by removing MPEG2 decoders from DVD players, the compressed digital information can be distributed/ processed throughout the logical ring network before reaching its ultimate destination (e.g., a television attached to or incorporating an MPEG2 decoder).” See column 10, lines 49-54 of Edens, emphasis added.
- “As will be described below for one embodiment, the MPEG2 decoding will occur **only after** such information leaves logical ring network 120 (e.g., it a

television where the information will be decoded and decompressed for viewing)." See column 13, lines 61-65 of Edens, emphasis added.

- "The default data stream channel assignments illustrated in Table III allocate the 22.5792 Mbit total network bandwidth... to allow for the following simultaneous digital media streams: (i) 4-CD-quality digital stereo audio streams; (ii) 2 MPEG2 compressed digital audio/video streams...." See column 33, lines 18-24 of Edens, emphasis added.
- "As noted above, once a compressed digital audio/video signal is obtained (e.g., MPEG2 audio/video received by the DSS IRD described above, or Wavelet-encoded NTSC video received by the TV/CATV tuner described above), it can be distributed across a logical ring network to a variety of destination devices (e.g., televisions or monitors), where it can be decoded and displayed. Digitizing an analog TV/CATV broadcast and compressing the NTSC signal with the Wavelet encoder described above (or the MPEGI encoder described below) provides a compressed digital video signal that can be distributed throughout a logical ring network and decoded by a television or other monitor." See column 99, lines 39-52 of Edens, emphasis added.
- "Having described the manner in which an MPEG2 reference clock effectively can be delivered over a logical ring network (operating at a different frequency), the architecture of an MPEG2 decoder component in a device (such as a television or monitor) will now be explained." See column 103, lines 57-61 of Edens, emphasis added.

In addition, there is no need to transmit decompressed video data onto the network of Edens, since each video screen in the system of Edens already includes a uniquely associated MPEG decoder. Referring to FIG. 1 of Edens, for example, note the small TV 165 includes a MPEG decoder 161, and the large TV 155 includes a MPEG decoder 151. It is also worth noting that there is no instance in FIG. 1 of Edens of a display device that does not include a uniquely associated MPEG decoder.

For at least the foregoing reasons, Appellant respectfully submits that Edens teaches away from transmitting uncompressed or decompressed video data over its local ring network, and there is no rational underpinning to support the Examiner's obviousness rejection.

EDENS AND NUSBICKEL ARE NOT PROPERLY COMBINABLE

Edens teaches that some prior art home automation networks utilize unshielded twisted pair (UTP) telephone wiring to carry analog audio and video signals. See column 4, lines 6-8 of Edens. Edens teaches that analog modulation of source audio and video signals over the UTP cables, however, produces relatively low-quality audio and video output. See column 4, lines 8-11 of Edens. To overcome this and other prior art deficiencies, Edens discloses transmitting compressed video data over a synchronous logical ring network which operates on an existing physical twisted-pair telephone topology. See column 9, lines 56-61, column 10, lines 50-55 and FIG. 1 of Edens.

Nusbickel, on the other hand, discloses (i) converting video data into an analog signal with an analog video server 21, (ii) modulating the analog video signal with a RF modulator 31, and (iii) transmitting the modulated analog video signal (TV signal) over a token-ring local area network 23 to one or more workstations 25. See column 3, lines 39-64, column 5, lines 2-5, and FIG. 2 of Nusbickel. Nusbickel discloses, in other words, transmitting a decompressed, modulated analog video signal over a token-ring local area network 23. See column 3, lines 39-64 and FIG. 2 of Nusbickel.

Appellant respectfully submits that a person of ordinary skill in the art would not have been motivated to modify the network architecture in Edens to transmit a decompressed, modulated analog video signal as taught in Nusbickel since Edens expressly teaches that such an analog modulation transmission technique produces low-quality audio and video outputs. Moreover, it is unclear whether a person of ordinary skill in the art would even have been motivated to reduce the expense of the system in Edens as suggested in the Official Action by transmitting decompressed, modulated analog video signals as taught in Nusbickel, because

Edens expressly teaches that the adapters and other devices included in the system are relatively inexpensive. See column 9, lines 43-46 of Edens. To this point, Edens teaches that it is less costly and, therefore, preferable to include such inexpensive adapters and other devices over having to replace existing consumer electronics. See column 9, lines 39-46 of Edens.

For at least the foregoing reasons, Appellant respectfully submits that a person of ordinary skill in the art would not have been motivated to modify the teachings of Edens to transmit uncompressed or decompressed information over the ring network as taught in Nusbickel. Appellant respectfully submits, therefore, that claim 6 is patentable over Edens and Nusbickel.

VIII. CONCLUSION

For all the foregoing reasons, Appellant submits that the rejection of claim 6 is erroneous and reversal thereof is respectfully requested.

If there are any additional fees due in connection with the filing of this appeal brief, please charge them to our Deposit Account **50-3381**. If a fee is required for any extension of time under 37 C.F.R. §1.136 not accounted for above, such an extension is requested and the fee should be charged to the above Deposit Account.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Patrick O'Shea", is written over a horizontal line.

Patrick J. O'Shea
Reg. No. 35,305
O'Shea Getz P.C.
1500 Main St., Suite 912
Springfield, MA 01115
(413) 731-3100, Ext. 102

CLAIMS APPENDIX

6. (Previously Presented) A local network having a ring network configuration with a plurality of subscribers each connected within the ring network by a data line to transmit and receive data therebetween, the local network comprising:

a first subscriber configured as a data source that transmits compressed audio and video data onto the ring network;

a second subscriber that receives decompressed audio data via the ring network;

a third subscriber that receives decompressed video data via the ring network,

a fourth subscriber that includes

(i) a bit stream decoder that receives the compressed audio and video data via the ring network and decodes the compressed audio and video data and provides decompressed audio and video data;

(ii) a separation stage that receives the decompressed audio and video data and separates the decompressed audio and video data to provide the decompressed audio data signal and the decompressed video data signal; and

(iii) a control unit that controls the transmission of the decompressed audio data signal and the decompressed video data signal onto the ring network

where the second, third and fourth subscribers each comprise a data sink and the second, third and fourth subscribers are separate from each other and connected within the ring network by the data line.

EVIDENCE APPENDIX

None.

RELATED PROCEEDING APPENDIX

None.